Climate change continues to impact UK waters

Description

The Marine Climate Change Impacts Partnership (MCCIP) has published its latest Report Card, detailing a comprehensive assessment on how climate change is affecting UK waters. MCCIP is a partnership between scientists, government and the marine community which enables clear communication and engagement across a range of key marine topics. The Met Office has contributed scientific expertise to a range of these topics, as well as being a partner organisation of MCCIP.

For the first time, Arctic sea-ice coverage is considered by the report's authors. The report states that a long-term decline is clearly apparent, with Arctic sea-ice extent retreating and the ice becoming thinner as temperatures rise. This may provide opportunities for European and Asian commercial ships to cross the globe via northern polar routes.

The report card explains how short term variability means some years will be cooler than others. However, long term records clearly demonstrate an overall warming trend in recent decades, which is expected to continue in the future.

In addition, the 2013 report's regional maps highlight differences across the UK's seas and show the importance of local-scale impacts. For instance, the movement of fish species – important to commercial and recreational fishermen – and how non-native species are expanding their range are both covered.

Some key findings in the 2013 MCCIP Report Card include:

• Temperature records continue to show an overall upward trend despite short-term variability. For example, in the last decade, the average UK coastal sea surface temperature was actually lower in 2008-2012 than in 2003-2007.

• The seven lowest Arctic sea-ice extents in the satellite era were recorded between 2007 and 2013. The continuing downward trend is providing opportunities for the use of polar transit routes between Europe and Asia by commercial ships.

• Changes to primary production are expected throughout the UK, with southern regions (e.g. Celtic Sea, English Channel) becoming up to 10% more productive and northern regions (e.g. central and northern North Sea) up to 20% less productive; with clear implications for fisheries.

• There continue to be some challenges in identifying impacts of climate change. These are due to difficulties distinguishing between short-term variability and long-term trends, and between climate drivers and other pressures.

Dr Matthew Frost of the Marine Biological Association and Chair of the MCCIP Report Card Working Group said:

"The marine environment is subject to a wide range of man-made pressures but can also change in

response to natural processes. Disentangling these factors to enable identification of current and potential future impacts of climate change continues to be one of the greatest challenges facing marine scientists today. We have sought to clearly explain these challenges whilst continuing to report on the rapid and significant impacts of marine climate change."

Marine Environment Minister George Eustice said:

"This report improves our understanding of how UK seas are already influenced by climate change and of potential changes in the future. Understanding these impacts, threats and opportunities is an essential basis for managing our marine environment."

The report card highlights how little is known about climate change impacts on the "marine economy", despite its importance for food (fish and aquaculture), energy (oil, gas and renewable energy), transport and coastal tourism and marine recreation. Coastal tourism and marine recreation is a key economic sector that could be highly sensitive to climate change (e.g. the threats of flooding, coastal erosion and opportunities for increasing visitor numbers), but little is known about future social and economic impacts.

Date Created
December 2013

Cold snap expected

Description

The UK is going to see a very short, sharp, cold snap. From Wednesday night (4th Dec) into Thursday morning (5th Dec) Scotland, northern England and Northern Ireland will see some strong winds, while Scotland will see some wintry showers and snow. However temperatures will return to normal as we head through the weekend, and be more in line with what should be expected for December.

A rapidly deepening Atlantic depression is expected to move in an easterly direction to the north of Scotland bringing westerly gales, with gusts of 60 to 70 mph extending southwards across northern and some central parts of the UK on Wednesday night and Thursday. Northern Scotland could see gusts of 80mph, and potentially 90mph for a time.

Because of this the Met Office has issued a Yellow Severe Weather Warning for strong winds. The public should be aware of possible disruption to travel, especially across Scotland, parts of Northern Ireland and Northern England.

The winds are expected to veer northerly and bring the colder arctic air southwards across northern areas before easing into Friday. The winds could exacerbate high tides and may increase the risk of coastal flooding in the Northern and Western Isles and along the East Coast of England.

A Yellow warning for snow is also in place. It runs from 6am Thursday to 12 noon on Friday, covering the northern half of Scotland, snow showers are expected to be most frequent across the Northern Isles, the North Highlands and northern Aberdeenshire. Low laying areas could see 2 – 5cms of snow and higher altitudes 10 – 20cms. In addition the strong winds could lead to some drifting of snow and possibly blizzard conditions on higher ground. Icy conditions may also develop on some roads across Scotland on Thursday night and Friday morning.

This winter storm is not expected to be as powerful as those in January 2012 and December 2011

This is expected to be a short-lived cold snap, with temperatures quickly recovering to near normal over the weekend.

Our video explains what to do during a Yellow warning for wind. You can also download a weather warnings widget for your website.

Date Created
December 2013

UPDATED: Wind and rainfall data 4 to 5 December 2013

Description

UPDATED TO INCLUDE LATEST WIND SPEEDS AS AT 3PM, 5 DECEMBER 2013

As forecast, there have been severe gales with widespread gusts of between 60 and 80mph across Scotland and northern parts of England. Some very high level mountain sites have reported speeds of over 140mph, but these are in very exposed areas and not representative of the winds most people have experienced.

UK MAX HOURLY GUST SPEED 4 DEC 1800HRS – 5 DEC 0600HRS

SITE NAME	AREA	ELEVATION	MAX GUST SPEED (MPH)
ALTNAHARRA	SUTHERLAND	81	93
LOCH GLASCARNOCH	ROSS & CROMARTY	269	92
DRUMALBIN	LANARKSHIRE	245	90
SOUTH UIST RANGE	WESTERN ISLES	4	89
HIGH BRADFIELD	SOUTH YORKSHIRE	395	87
EMLEY MOOR	WEST YORKSHIRE	267	86
STORNOWAY AIRPORT	WESTERN ISLES	15	85
ORLOCK HEAD	DOWN	35	84
KINLOSS	MORAY	5	83
SPADEADAM	CUMBRIA	285	83
ESKDALEMUIR	DUMFRIESSHIRE	236	83
SKYE: LUSA	WESTERN ISLES	18	83
TIREE	ARGYLL	9	82
DUNSTAFFNAGE	ARGYLL	3	82

MOUNTAIN SITES MAX GUST SPEED 4 DEC 1800HRS – 5 DEC 0600HRS

SITE NAME	AREA	ELEVATION	MAX GUST SPEED (MPH)
AONACH MOR	INVERNESS-SHIRE	1130	142
CAIRNWELL	ABERDEENSHIRE	928	137

BEALACH NA BA	ROSS & CROMARTY	773	116
GREAT DUN FELL	CUMBRIA	847	113
GLEN OGLE	PERTHSHIRE	564	106

It has been very wet in some areas overnight as well with 50.8mm of rain being recorded at Tyndrum, Perthshire and 42.4mm at Cluanie Inn, Ross & Cromarty.

Date Created
December 2013

Overnight minimum temperatures

Description

As forecast, last night Scotland saw warmer temperatures than any other part of the country, with overnight maximum temperatures of 16.2 °C recorded in Ross and Cromarty. In fact, many parts of Scotland saw warmer temperatures overnight than they did during the daytime.

Maximum overnight temperatures Tuesday 11 December 2013

Location	Area	Temperature (°C)
Achnagart	Ross & Cromarty	16.2
Kinlochewe	Ross & Cromarty	15.2
Altnaharra No 2	Sutherland	14.6
Kinloss	Moray	14.3
Lossiemouth	Moray	14.2
Cluanie Inn No 3	Ross & Cromarty	14.2
Drumnadrochit	Inverness-shire	14.1
Aultbea No 2	Ross & Cromarty	14
Resallach	Sutherland	13.8
Skye, Lusa	Western Isles	13.7

Not everywhere was so warm with some areas in the southern part of the UK recording several degrees below freezing.

Lowest minimum temperatures Tuesday 11 December 2013

Location	Area	Temperature (°C)
Pershore	Hereford & Worcester	-3.1
Shoreham Airport	West Sussex	-3.1
Goudhurst	Kent	-3.0
Wiggonholt	West Sussex	-2.9
Frittenden	Kent	-2.6
Hurn	Dorset	-2.2
Kew Gardens	Greater London	-2.0
Northolt	Greater London	-2.0
Charlwood	Surrey	-1.9
Odiham	Hampshire	-1.9

More mild temperatures are forecast in Scotland over the next few nights, before it becomes slightly more unsettled, particularly in the North of the UK. See your local forecast and temperature range on our website.

Date Created
December 2013

Our change in the weather and how the jet stream is driving it

Description

After a quiet spell of weather courtesy of a slow moving area of high pressure, we are now entering an unsettled period as a series of Atlantic depressions are expected to pass close to the northwest of Britain during the next week.

High pressure has now moved away and is settled over Europe and a powerful jet stream is developing over the Atlantic which will be the main driving force behind this spell of unsettled weather.

What is the jet stream?

The jet stream is a band of fast moving westerly winds high up in the atmosphere which circle around the pole in the northern hemisphere. It can feature winds of up to 200 knots (230 mph) or more, and these winds tend to guide wet and windy weather systems which come in off the Atlantic.

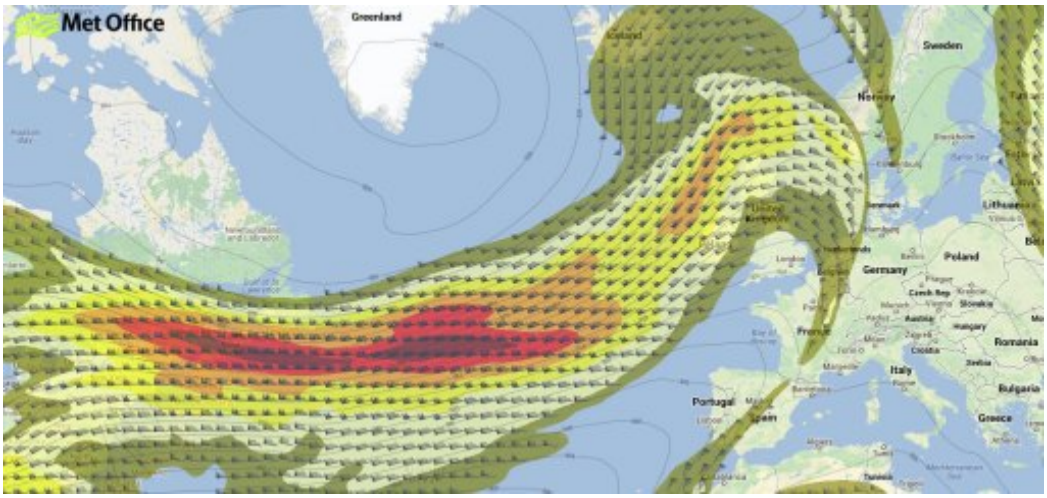
The jet moves around a fair bit and its position can have a big impact on weather here in the UK depending on where it is.

If the jet is over the UK or just to the south, we tend to get a lot of wet and windy conditions as it brings weather systems straight to us. If the jet is to the north of us, it guides that changeable weather away to the north to leave the UK with more settled conditions.

What’s the jet stream doing now?

Unsurprisingly given the outlook for the next week, with a succession of Atlantic depressions passing by to the northwest of Scotland, the jet is positioned to the northwest of the UK too.

As you can see from the picture below, the jet currently swoops east from Canada – swinging northeast over the Atlantic towards the UK.



Forecast position of jet stream at midday Saturday 14 December 2013

Closer to the ground very cold air is also streaming south from Canada and meeting warm air moving north from the Caribbean. It is where these two air masses meet under the jet stream that powerful Atlantic depressions form and are blown across the ocean towards our shores.

It is these depressions that bring a significant risk of severe gales and heavy rain affecting at least the northwest of the UK at times.

What's the weather outlook?

Currently, Met Office National Severe Weather Warnings have been issued for wind across some northwestern and northern areas for the weekend. Gusts of 60-70 mph are likely with a risk of gusts to 80 mph or more across exposed parts of northwest Scotland.

However, at this stage there remains uncertainty regarding the extent of the strongest winds and these warnings will be updated as the weather develops over the weekend.

Looking ahead, while we expect further depressions to develop it is not possible to say exactly how vigorous they may be or pinpoint where they will be in a week's time. This means it is too early to say which areas will experience the strongest winds and heaviest rain, however there are indications that areas further to the south of the UK may be affected at times.

You can stay up to date with what to expect with our detailed forecasts out to 5-days and our weather warnings, as well as a general view of what we expect out to 30 days and find out what to do in severe weather

You can find out more about the jet stream in our YouTube video.

Date Created
December 2013

Geminid meteor shower Twitter interview

Description

Starting on 7 December and ending on the 16 December, the Geminid meteor shower is for many the highlight of the meteor shower calendar in 2013.

The peak of the Geminid meteor shower took place on 13-14 December, when you could see more than 50 meteors per hour. The Geminids is different to other meteor showers as its meteors originate from an asteroid, as opposed to a comet, meaning they are very rocky and gritty, making them slightly easier to see than other meteor showers.

Ahead of the peak of the meteor shower, we held a Twitter interview with Adrian from Meteorwatch where you sent in your questions and the top five got an answer. In case you missed the interview and Adrian's excellent answers, you can see them in full below:

> @metoffice @SAndersonRacing The Meteor shower can be viewed anywhere in the UK with clear skies. Areas without light pollution may see more
>
> — Virtual Astronomer (@VirtualAstro) December 13, 2013

> @metoffice @arkyLyng The colour of the light of a meteor is due to the minerals it contains. Yellow = sodium, blue/green = copper etc.
>
> — Virtual Astronomer (@VirtualAstro) December 13, 2013

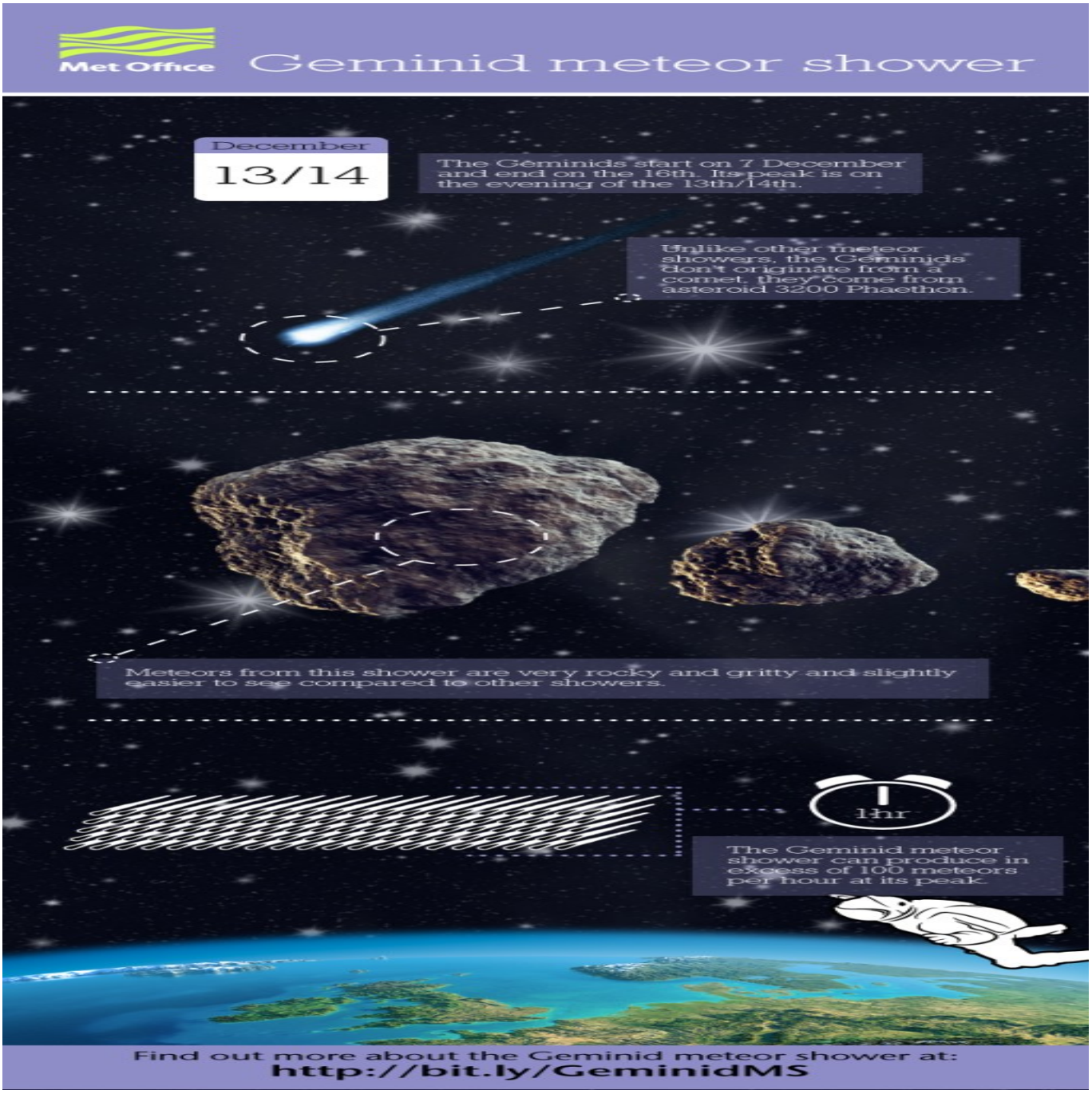
> @metoffice @tgwktm The tricks are: Get away from bright lights and get comfortable. Keep your gaze on the sky as long as possible.
>
> — Virtual Astronomer (@VirtualAstro) December 13, 2013

> @metoffice @thrusloes At peak there can be up to 120 geminids per hour. Because of the Moon expect to see up to 60 bright meteors tonight
>
> — Virtual Astronomer (@VirtualAstro) December 13, 2013

> @metoffice@bridgewilks The Geminids are roughly 120 per hour at peak – 2 a minute, but there can be bursts of tens a minute #GeminidQandA
>
> — Virtual Astronomer (@VirtualAstro) December 13, 2013

Below is our infographic about the Geminid meteor shower. To find out when other meteor events are

taking place, visit the Meteorwatch website.


Met Office
Geminid meteor shower
December
13/14
The Geminids start on 7 December and end on the 16th. Its peak is on the evening of the 13th/14th.
Unlike other meteor showers, the Geminids don't originate from a comet, they come from asteroid 3200 Phaethon.
Meteors from this shower are very rocky and gritty and slightly easier to see compared to other showers.
1hr
The Geminid meteor shower can produce in excess of 100 meteors per hour at its peak.
Find out more about the Geminid meteor shower at:
http://bit.ly/GeminidMS

Date Created
December 2013

Updated Wind and Rainfall totals for 18th to 19th December

Description

As forecast there were severe gales and heavy rain overnight. See the tables below for the strongest low level gusts and the largest rain totals across the UK.

We are expecting more stormy weather over the coming days, with spells of heavy rain and gales affecting the UK – with the heaviest rain affecting the west and south west and strongest winds affecting the far north. Warnings for each individual spell of wet and windy weather will be issued when we are confident they will provide useful and accurate advice.

UK MAX HOURLY GUST SPEED 18TH DEC 1800HRS – 19TH DEC 0700HRS

SITE NAME	AREA	ELEVATION	MAX GUST SPEED (MPH)
WIGHT: NEEDLES OLD BATTERY	ISLE OF WIGHT	80	94
SOUTH UIST RANGE	WESTERN ISLES	4	90
TIREE	ARGYLL	9	87
PLYMOUTH, MOUNTBATTEN	DEVON	50	85
CASTLEDERG	TYRONE	49	84
PEMBREY SANDS	DYFED	3	82
CAPEL CURIG NO 3	GWYNEDD	216	81
STORNOWAY AIRPORT	WESTERN ISLES	15	77
ALTNAHARRA NO 2	SUTHERLAND	81	77
FAIR ISLE	SHETLAND	57	76

24 HOUR UK RAINFALL TOTALS 18TH DEC 0700HRS – 19TH DEC 0700HRS

SITE NAME	AREA	PRECIP AMOUNT (MM)
TREDEGAR	GWENT	38.4
CARDINHAM, BODMIN	CORNWALL	35
WHITECHURCH	DYFED	34.4
TYNDRUM	PERTHSHIRE	32.2
LIBANUS	POWYS	30.8
SHAP	CUMBRIA	30.6
OKEHAMPTON,	DEVON	30.6

KESWICK	CUMBRIA	28.8
TULLOCH BRIDGE	INVERNESS-SHIRE	27
BALA	GWYNEDD	26.4

Date Created
December 2013

Wind and rainfall data 23 to 24 December 2013 – Updated 1130

Description

As forecast it was a stormy night across the southern half of the UK. Below you can see the highest gusts of wind and rainfal totals recorded at Met Office observing sites from 6pm 23 December and 7am 24 December.

Maximum gust speeds:

Site	Area	Elevation (m)	Max gust speed (mph)
Needles Old Battery	ISLE OF WIGHT	80	92
Berry Head	DEVON	58	84
Langdon Bay	KENT	117	76
Gorleston	NORFOLK	4	75
Manston	KENT	49	75
Mumbles Head	WEST GLAMORGAN	43	75
South Uist Range	WESTERN ISLES	4	75
Plymouth Mountbatten	DEVON	50	74
Solent	HAMPSHIRE	9	74
Aberdaron	GWYNEDD	95	73
North Wyke	DEVON	177	73

Rainfall totals:

Site	Area	Rainfall (mm)
Kenley Airfield	GREATER LONDON	53.6
Charlwood	SURREY	41
Wych Cross	EAST SUSSEX	38.6
Alice Holt Lodge	HAMPSHIRE	33.8
Goudhurst	KENT	32.2
Middle Wallop	HAMPSHIRE	31.6
Frittenden	KENT	30.8
Cluanie Inn	ROSS & CROMARTY	30.8
Liscombe	SOMERSET	30.4

Hurn	DORSET	29.8
Larkhill	WILTSHIRE	29.2

The Met Office at Boscombe Down, Salisbury Plain, recorded 66.7mm of rain in the 24 hours 9am 23 December to 9am 24 December. This is provisionally a new all time daily record in any month for the station – records going back to January 1931. The previous record was 62.3mm on 16 August 1977.

Today we can expect severe gales across western and northern Scotland, with damaging gusts in places, especially around the coasts.

For Christmas Day and Boxing Day, we are expecting a colder and less windy interlude with overnight frosts and sunny spells and a wintry mix of showers, so there is a chance that some places, especially the higher ground of the west and north, may see a White Christmas. For most of us though Christmas is likely to be green not white.

Another Atlantic depression is expected to bring a further spell of wet and stormy weather to the UK on Friday.

During this period of unsettled weather, people are advised to stay up to date with the latest Met Office forecasts and National Severe Weather Warnings and find out what to do in severe weather so they can plan ahead for the weather in store and make the most of the festive season.

Date Created
December 2013

Was it a white Christmas?

Description

Using technology such as radar, webcams and ground based sensors combined with the expert opinion of experienced forecasters, the Met Office is able to declare that no snow was reported by our Met Office Observers on Christmas Day 2013.

Although a few of our automated weather stations recorded sleet or snow over some hills, Christmas this year was green for most of Britain rather than white.

Date Created
December 2013

Iconic British gardeners meet Met Office scientists

Description

Devon's gardeners have had some of their horticultural problems answered thanks to a visit from the iconic BBC Radio 4 Gardeners Question Time team to the Met Office.

The show, in front of a 200 strong audience, was lead by Met Office and BBC forecaster, and show regular, Peter Gibbs with Bunny Guinness, Anne Swithenbank and Pippa Greenwood making up the panel of experts.

While at the Met Office Headquarters in Exeter the panellists looked at the work undertaken on the almost 11 hectare site aimed at promoting bio-diversity and reducing the impacts of the building on the surrounding fauna and flora. The panel heard about the success of the wildflower meadow and how outlawing the use of fertiliser has reduced pollution in the ponds, leading to an increase in amphibians and the reintroduction of the very rare Maiden pink (*Dianthus deltoides*). Devon Wildlife Trust has helped with the work and the Met Office has been awarded a coveted Biodiversity Benchmark Award.

The panel also talked to some of the many world leading scientists who work for the Met Office in Exeter and heard how some of their research is leading to changes in the way we think about plants and how we garden. They learnt how the Met Office has developed a mobile weather service that not only lets you check the weather forecast for where you are via your mobile phone but also allows you to upload and share your local weather conditions. Bunny Guinness was so impressed she vowed she would be using it in future. The panellist also heard how increased atmospheric carbon dioxide could result in increased planet growth and why global warming has not led to an end to cold winters.

The episode will be aired in the Christmas special on BBC Radio 4 on Friday 27th December at 3pm, with a repeat on Sunday 29th at 2pm December.

Date Created
December 2013

Wind and rainfall data 27 December 2013

Description

As forecast, a deep area of low pressure developed over the Atlantic Ocean in the early hours of Friday morning bringing with it a further spell of wet and very windy weather across the UK as it tracked northeastwards, crossing northwest Scotland.

Below you can see the highest gusts of wind and rainfall totals recorded at Met Office observing sites from midnight to 2.30pm on 27 December.

Maximum gust speeds:

Site	Area	Elevation (m)	Max gust speed (mph)
Aberdaron	Gwynedd	95	102
Capel Curig	Gwynedd	216	87
Mumbles Head	West Glamorgan	43	85
St Bees Head	Cumbria	124	85
Inverbervie	Kincardineshire	134	81
Valley	Gwynedd	10	81
Lake Vyrnwy	Powys	360	78
Mona	Anglesey	60	78
Needles Old Battery	Isle of Wight	80	78
Dundrennan	Kirkcudbrightshire	113	77
Pembry Sands	Dyfed	3	76

Rainfall totals:

Site	Area	Rainfall (mm)
Tulloch Bridge	Inverness-shire	38
Tyndrum	Perthshire	37.8
Charterhouse	Roxburghshire	37.8
Kiedler Castle	Northumberland	33.2
Achnagart	Ross and Cromarty	32.8
Redesdale Camp	Northumberland	28.6
Cluanie Inn	Ross and Cromarty	26.2

Eskdalemuir	Dumfriesshire	24.2
Dalwhinnie	Inverness-shire	24.2
Newton Rigg	Cumbria	22
Banagher, Caugh Hill	Londonderry	19.4

Winds will slowly ease from tonight and we are expecting a brighter and less windy interlude over the course of Saturday and for most of Sunday with overnight frosts and sunny spells and a wintry mix of showers.

Another active atlantic frontal system is expected to swing eastwards across the country on Sunday night and Monday morning. A combination of strobng winds and moist air has the potential to give locally significant amounts of rain which could cause the risk of further flooding. The wind and rain are expected to clear eastward on Monday morning.

During this period of unsettled weather, people are advised to stay up to date with the latest Met Office forecasts and National Severe Weather Warnings and find out what to do in severe weather so they can plan ahead for the weather in store and make the most of the festive season. We would also encourage you to stay up to date with the latest news on flooding by checking the Environment Agency's website for the latest flood alerts and warnings.

Date Created
December 2013

Wind and rainfall data 29 to 30 December 2013

Description

As forecast gales and heavy rain are again affecting the UK. Below you can see the highest gusts of wind and rainfal totals recorded at Met Office observing sites from 6pm 29 December and 8am 30 December.

Maximum gust speeds:

Site	Area	Elevation (m)	Max gust speed (mph)
CAPEL CURIG	GWYNEDD	216	77
BERRY HEAD	DEVON	58	75
SCILLY: ST MARYS AIRPORT	ISLES OF SCILLY	31	71
PLYMOUTH, MOUNTBATTEN	DEVON	50	71
WIGHT: NEEDLES OLD BATTERY	ISLE OF WIGHT	80	70
CULDROSE	CORNWALL	76	66
MILFORD HAVEN	DYFED	44	61
NORTH WYKE	DEVON	177	61
EDINBURGH, BLACKFORD HILL	MIDLOTHIAN	134	60
CARDINHAM, BODMIN	CORNWALL	200	59

Rainfall totals:

Site	Area	Rainfall (mm)
MURLOUGH	DOWN	54.4
THREAVE	KIRKCUDBRIGHTSHIRE	52.2
WHITECHURCH	DYFED	47.4
ESKDALEMUIR	DUMFRIESSHIRE	42.4
KESWICK	CUMBRIA	41.8
DUNDRENNAN	KIRKCUDBRIGHTSHIRE	41.4
GLASGOW, BISHOPTON	RENFREWSHIRE	40.4
TREDEGAR, BRYN BACH PARK	GWENT	37.2
ST BEES HEAD	CUMBRIA	36.4
BLENCATHRA	CUMBRIA	35

The unsettled weather will continue through the rest of the week and everyone is advised to stay up to date with the latest Met Office forecasts and National Severe Weather Warnings and find out what to do in severe weather.

Date Created
December 2013

2013: Average figures mask some notable highlights

Description

Provisional statistics for 2013 suggest it has been a very average year – but those annual figures mask a year which features some significant weather highlights.

Using figures up to 29 December and then assuming average conditions for the last two days of the year, statistics for 2013 show temperature, rainfall and sunshine amounts have all been very close to the 1981-2010 average.

The mean temperature for the UK is currently 8.76C, which is just 0.08C below the annual long-term average, rainfall stands at 1079.8 mm, which is about 94% of the average, and sunshine is at 1425.7 hours, which is 104% of the average. All in all, it seems like a very ‘normal’ year.

However, a closer look at individual months and seasons shows a different picture.

The coldest spring for more than 50 years

This year’s spring was the coldest since 1962. Temperatures were well below average in all areas, but particularly England and Wales, and it was the coldest spring in the Central England temperature series since 1891.

The cold season was mainly due to the very cold March (the coldest month of the extended winter) – but April and May also saw well below average temperatures. Winds were often from the east or north, with notably low temperatures and some unseasonably late snowfalls in places extending into April and May.

A fine summer and autumn’s St Jude’s Day storm

However, after a mixed June, July kickstarted a period of relatively fine weather which led to the warmest, driest and sunniest summer since 2006. The season itself isn’t that remarkable in its own right, but becomes so when put into context of the last few years which have generally seen disappointing weather.

Autumn was fairly average in terms of its numbers, with temperature, rainfall and sunshine close to average, but October featured the St Jude’s Day storm. This storm is judged to be ranked within the top 10 most severe storms in the autumn across southern England in the last 40 years, but is not in the same category as the ‘Great Storm’ of October 1987.

A mild but stormy December

After a fairly dry November to finish the autumn, we moved in to what has become a very unsettled and stormy December. The first major storm came through on the 5th and 6th, then another followed on the 18th and 19th, with another storm tracking past the UK on the 23rd and 24th.

While there have been strong winds during December, rainfall has seen marked regional differences. For example, parts of southern England have seen around double the amount of rain they would normally expect while some spots along the east coast of the UK have only seen around half of their December average.

Other than the generally unsettled conditions, this December has also been mild – it is currently ranked as the seventh mildest December in our records dating back to 1910, although this ranking could change when the final figures come in.

You can find a wealth of information about the UK's weather and climate throughout 2013 on our climate pages.

Some 2013 extremes:

Max temp – 34.1C at Heathrow, London 1 August

Min temp – -13.6C at Buntingford, Hertfordshire 22 January

Max wind gust – 142mph, Aonach Mor, Invernesshire 5 December

Keeping the UK informed

It has also been a notable year for the Met Office. Throughout 2013 the Met Office's forecasts and warnings have provided timely advice during the periods of severe weather we have seen, helping the UK stay prepared and minimise impacts.

Our Get Ready for Winter and Get Ready for Summer campaigns saw many different companies and organisations working with us to help people prepare for the ever-changing UK weather.

We've continued to work in partnership with others around the world to develop the understanding of weather and climate science, helping to drive forward accuracy.

A year of achievement for the Met Office

Met Office staff have again received a high level of recognition for their work. In October Dr Nick Dunstone was named Outstanding Young Scientist for Climate Sciences by European Geophysical Union, while Dr Peter Stott was recognised as one of the 'Global Thinkers' of 2013 by Foreign Policy magazine.

Very recently, the Met Office's Chief Executive, John Hirst, and Chief Scientist, Professor Julia Slingo, were recognised in the New Year's Honours list.

Other Met Office highlights include:

- The launch of Europe's Space Weather Prediction Centre helping protect the technologies our day-to-day lives rely on from severe solar flares, space storms and solar wind which can disrupt them.

- The launch of Climate Service UK marking a step-change in the provision of services to assess how a changing climate might affect business and society.
- Retaining our position as the leading operational forecaster in the World.
- The number of weather reports received by our Weather Observation Website passing 100 million.
- A celebration of the centenary of the pioneer of modern day weather forecasting, Lewis Fry Richardson, taking up his post as Superintendent of Eskdalemuir Observatory.

Date Created
December 2013